

CLAIMS

1. A screw element with a tool engagement means (5, 6) and a spring element (8) which is formed on the screw element in one piece in coaxial relationship with the screw axis (7) and which with its free edge defines a workpiece contact plane which is perpendicular to the screw axis and which is at an axial spacing from the screw element (1), characterised in that the spring element (8) is mounted at the periphery of the screw element, that is to say a screw head (4) or a screw nut, it projects radially beyond the periphery and it forms a workpiece contact means (9) which is disposed outside the periphery and which is in concentric relationship with the screw axis (7).

2. A screw element as set forth in claim 1 characterised in that the spring element (8) is a ring which is concentric with respect to the screw axis (7) and which has a workpiece contact means (9) which is annular throughout.

3. A screw element as set forth in claim 2 characterised in that the ring forming the spring element (8) has a plurality of openings (20) distributed uniformly over its periphery.

4. A screw element as set forth in claim 1 characterised in that the spring element (8) comprises a plurality of radial, claw-like projections (11) which each have at least a respective portion of the workpiece contact means (9).

5. A screw element as set forth in claim 4 characterised in that three projections (11) are arranged distributed uniformly at the periphery of the screw element (1).

6. A screw element as set forth in one of the preceding claims characterised in that the spring element (8) has a relatively flat spring characteristic.

7. A screw element as set forth in claim 6 characterised in that the spring element (8) is of lower hardness than the screw element (1).

8. A screw element as set forth in one of the preceding claims characterised in that the spring element (8) has projections (13, 14, 14a) in the region of the workpiece contact means (9).

9. A screw (1) having a head (4) in the form of the screw element as set forth in one of the preceding claims characterised in that it is of a thread-forming and optionally self-boring nature.

10. A screw connection between two workpieces of which at least one is a metal plate or a plastic element, with a screw element as set forth in one of the preceding claims, characterised in that only the spring element (8) and it bears with a predetermined prestressing force against the adjoining workpiece.